NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

TRANSITION TO ORGANIC PRODUCTION

(Acre)

CODE 789

DEFINITION

Utilizing agricultural management strategies while transitioning from conventional to organic farming techniques.

PURPOSE

This practice is applied as part of a resource management system to minimize negative impacts of agricultural production on soil, water, air, plant, animal and social and cultural resources while transitioning to organic production. Organic production is a system that responds to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve and enhance biodiversity.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies where:

1. A conventional farming operation transitions to organic production;
2. All practice components necessary to implement complete system are specified;
3. Natural resources are adequate to properly follow an organic production system;

This standard does not apply to organic animal production. It does apply to lands on which these animals are raised.

CRITERIA

General Criteria Applicable to All Purposes

A transition to organic production plan shall be developed. This plan shall be a component of an overall conservation plan or a stand alone transition to organic agriculture plan. Farms must adhere to the National Organic Standards. This requirement includes operating under an organic production system plan approved by an accredited certifying agent and using materials in accordance with the National List of Allowed Synthetic and Prohibited Natural Substances (National and Vermont Organic Farmers (VOF) lists).

All methods of organic production must comply with Federal, State, and local regulations, including the Organic Food Production Act of 1990, as amended (7 U.S.C. 6501 et seq.), and regulations with the National Organic Program final rule (7 CFR Part 205).

Organically produced food and crops cannot be grown or produced using excluded methods, sewage sludge, or ionizing radiation.

Soil fertility and crop nutrients shall be managed through tillage and cultivation, crop rotations and cover crops, supplemented with animal and crop manures and byproducts and allowed synthetic materials.

All classes of crop pests including but not limited to weeds, insects and diseases shall be controlled primarily through management practices including physical, mechanical, and biological controls. Approved substances on the National and VOF list may also be used.

An appropriate set of mitigation techniques must be designed and implemented to reduce environmental risks associated with organic production management activities, in accordance with quality criteria in the local Field Office Technical Guide (FOTG). Mitigation techniques include practices such as vegetative buffers, filter strips and crop rotation, and management techniques such as nutrient application method and timing.

All methods of transition to organic production must be integrated with other components of the conservation system.

Additional Criteria To Protect Soil Resources

In conjunction with a conservation plan, the number, sequence and timing of tillage operations shall be managed to maintain soil quality and maintain soil loss at or below the soil loss tolerance (T) or any other planned soil loss objective. Systems shall be designed to aggressively build soil organic matter during the transition to organic production phase, and throughout organic rotation for long term sustainability of the system and to prevent soil loss off site.

Producers shall be encouraged to focus on techniques that may affect soil quality and to implement practices that will improve soil quality by increasing soil organic matter and maintaining protective cover on cropland and pasture.

When feasible, soil-building cover crops that can be rolled or crimped without tillage shall be used frequently in rotations.

Forage crops such as clover and other legumes will be recommended to build soil organic and nitrogen levels, while reducing phosphorus accumulation from otherwise desirable use of manure and compost in organic systems.

Additional Criteria to Protect Water Resources

The number, sequence and timing of tillage operations shall be managed in conjunction with other erosion control practices, in order to minimize sediment losses to nearby water bodies. Permanent vegetative cover will be used, especially buffer practices when appropriate, to reduced the threat of offsite movement of sediment.

The amount, source, placement, form and timing of the application of plant nutrients, including manure, organic by-products, and soil amendments will be properly managed to minimize agricultural nonpoint source of pollution of the ground and surface water resources.

Livestock shall be managed to minimize impact to nearby surface water bodies.

Additional Criteria to Protect Air Resources

Producers shall pay special attention when using approved pest and disease controls to minimize volatilization and drift that may impact non-target plants, animals or humans.

Producers will be encouraged to have a full understanding of transitional techniques that reduce the amount of dust and livestock odor that may impact surrounding communities and natural resources.

Additional Criteria to Protect Plant Resources

Producers shall be encouraged to pay special attention to substance label instructions including those directed at:

1. Preventing misdirected pest management control measures that negatively impact plants;
2. Appropriate climatic conditions, crop stage, soil moisture, pH, and organic matter in order to protect plant health;
3. Limiting substance residues in soil that can carry over and harm subsequent crops;
4. Creating buffers, hedgerows, and farmscapes using suitable plant species to improve habitat conditions, including food sources and micro-habitat conditions for beneficial insects and other natural predators of invertebrate pests.

Additional Criteria to Protect Animal Resources

Producers shall be encouraged to pay special attention to substance label instructions that minimize negative impacts to livestock and wildlife.

Additional Criteria to Protect Humans

Producers shall be encouraged to pay special attention to substance label instructions that minimize negative impacts on residents and workers

NOTE: *Specific cost-sharing programs or other funding sources may dictate criteria in addition to, or more restrictive than these.*

CONSIDERATIONS

Organic production responds to site-specific conditions by integrating and stacking management functions that include cultural, biological, and mechanical practices. This will foster cycling of resources, promote ecological balance, and conserve biodiversity. Consider the following principles and methods when planning transition to organic production:

1. Biological controls, such as insect predators and pathogens, can be used to suppress pest populations;
2. Cultural controls such as crop rotations, tillage, and mowing can make the environment less suitable for pest survival;
3. Approved pest and disease controls should be used judiciously in order to minimize pest resistance and environmental risk;
4. Livestock management systems, such as rotational grazing and grass-based dairying can reduce the need for synthetic substance controls and confinement based animal waste management systems. (Following grazing guidelines from NOFA-VT will ensure pasture forage intake requirements);
5. Use plant varieties that have resistance or tolerance to insects and disease to the greatest extent possible;
6. Create habitats for beneficial insects by increasing plant diversity, planting flowering plants in the families Compositae (daisy), Labiatae (mint), and Umbellifereae (dill), improving the spatial layout (increasing interspersion) of beneficial plants, and the planting of trap crops around the field perimeter;
7. Use carbon building and nitrogen building cover crops that can be rolled or crimped in place to create long-lasting mulch. Cover crops may also be tilled into the soil if conditions become necessary.

Consider controlling weed problems through:

- Mulching with fully biodegradable materials
- Mowing
- Livestock grazing
- Hand weeding and mechanical cultivation
- Flame, heat, or electrical means
- Plastic or other synthetic mulches provided that they are removed from the field at the end of the season.

PLANS AND SPECIFICATIONS

Plans and specifications for the transition to organic production shall be prepared for each field or treatment unit according to the Considerations, Criteria, and operations and maintenance described in this standard, and in keeping with other standards that are needed in order to implement Transition to Organic Production systems. Specifications shall be recorded using approved specification sheets, job sheets, narrative statements in the conservation plan, and other acceptable documentation such as that from the certifying agency. These shall describe the requirements for applying this practice and associated supporting practices to achieve the intended purpose.

As a minimum the transition to organic practice shall be planned for at least a three year period, and shall specify:

1. The list of conservation practices and components that will be needed in the process of transitioning to organic production;
2. Monitoring procedures;
3. Requirements for a comprehensive record keeping system;
4. And other specifications;
    - Plan map and soil map of managed fields;
    - Requirements for the organic materials that will be used;
    - Location of sensitive resources and setbacks, if applicable;
    - Operation and maintenance requirements.

The certifying agent, Vermont Organic Farmers, LLC (VOF) will have the 'farm operation plan' in their record system prior to official certification of the land. The farm operation plan includes all of the above requirements except the listed NRCS Conservation Practices.

The producer is encouraged to initiate contact and work directly with the VOF to determine the necessary steps in transitioning their land to organic production.

The conservationist shall also work directly with VOF on any outstanding resource concerns discussed at the transition farm visits and certification inspections.

Components. Components of complete transition to organic production management system may include, but are not limited to the Field Office Technical Guide Practice Standards listed below. Where contradictions exist between a practice standard and the Federal Rule embodying the National Organic Program (NOP), the NOP shall prevail.

- Composting Facility (317)
- Conservation Cover (327)
- Conservation Cropping Rotation (328)
- Contour Buffer Strips (332)
- Contour Farming (330)
- Stripcropping (585)
- Cover Crop (340)
- Critical Area Planting (342)
- Fence (382)
- Hedgerow Planting (422)
- Mulching (484)
- Nutrient Management (590)
- Pasture and Hayland Planting (512)
- Pest Management (595)
- Prescribed Grazing (528)
- Waste Utilization (633)
- Windbreak/Shelterbelt Establishment (380)
- Heavy use area (561)
- Residue Management (no-till seeding) (329
- Animal Trails and Walkways (575)
- Riparian Forested Buffer (391)

Design criteria for individual components shall be according to standards in the Vermont Field Office Technical Guide and organic management criteria as approved by a USDA accredited National Organic Program certification agency.

OPERATION AND MAINTENANCE

An operation and maintenance plan (O&M) shall be prepared for this practice. Appropriate job sheets may be used to serve as the management plan as well as supporting documentation, and shall be provided to the producer.

Operations and maintenance items may include:

- Review and periodic updates of the plan in order to incorporate new technology and follow the Organic Food Production Act of 1990, as amended (7 U.S.C. 6501 et seq.), and regulations with the National Organic Program final rule (7 CFR Part 205).
- Mitigation techniques identified in the plan in order to ensure continued effectiveness.

SUPPORTING DATA AND DUCUMENTATIONS

(450-GM, SUPPLEMENT VT8, FEBRUARY 2007)

VT407.10 Additional Guidelines to Clarify NRCS practice certification requirements for Organic Transition payments in Vermont.

REFERENCES

Northeast Organic Farming Association of Vermont, P.O. Box 697, Richmond, VT 05477, (802)434-4122, www.nofavt.org

Transitioning to Organic Production. George Kemper. Dec. 2006. www.attra.nact.org/organic.html

Vermont Organic Farmers Certification Guidelines and Applicant information. Vermont Organic Farmers, LLC. www.nofavt.org

Regulation of Organic Agriculture. Chapter VIII in 'A Legal Guide to the Business of Farming in Vermont'. http://www.uvm.edu/landlinkvt/?Page=legalguide.php